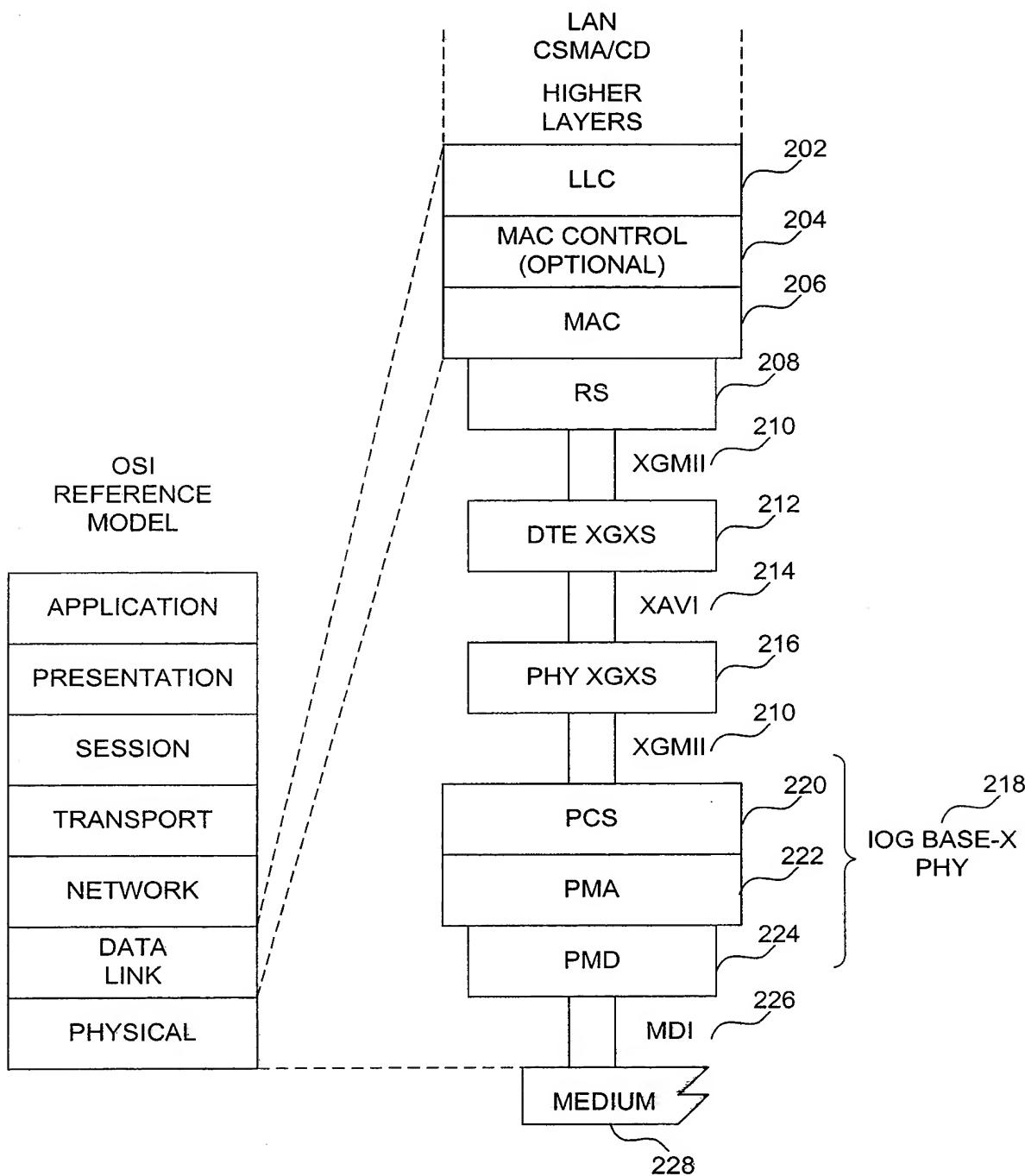


FIG. 1



**FIG. 2**

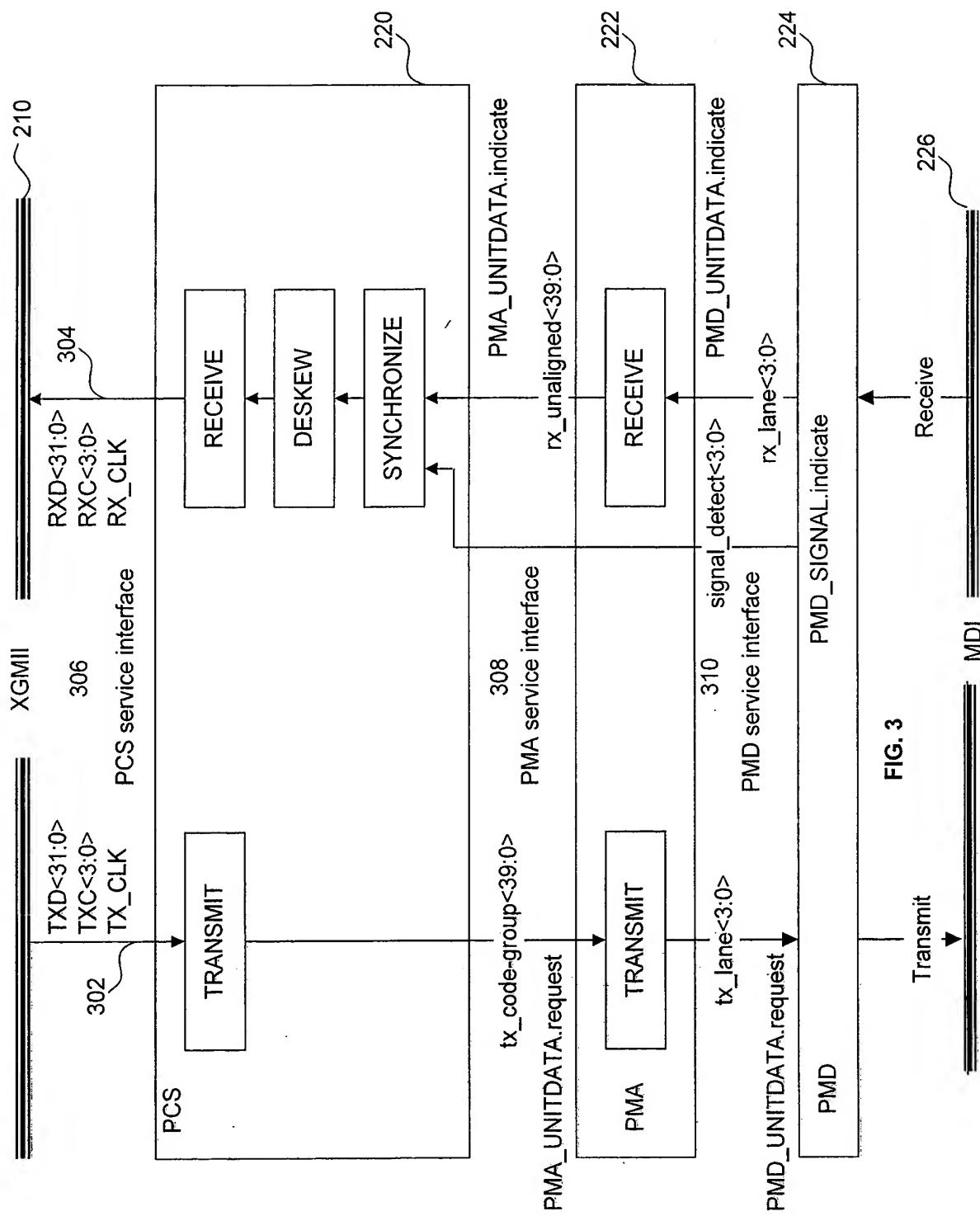
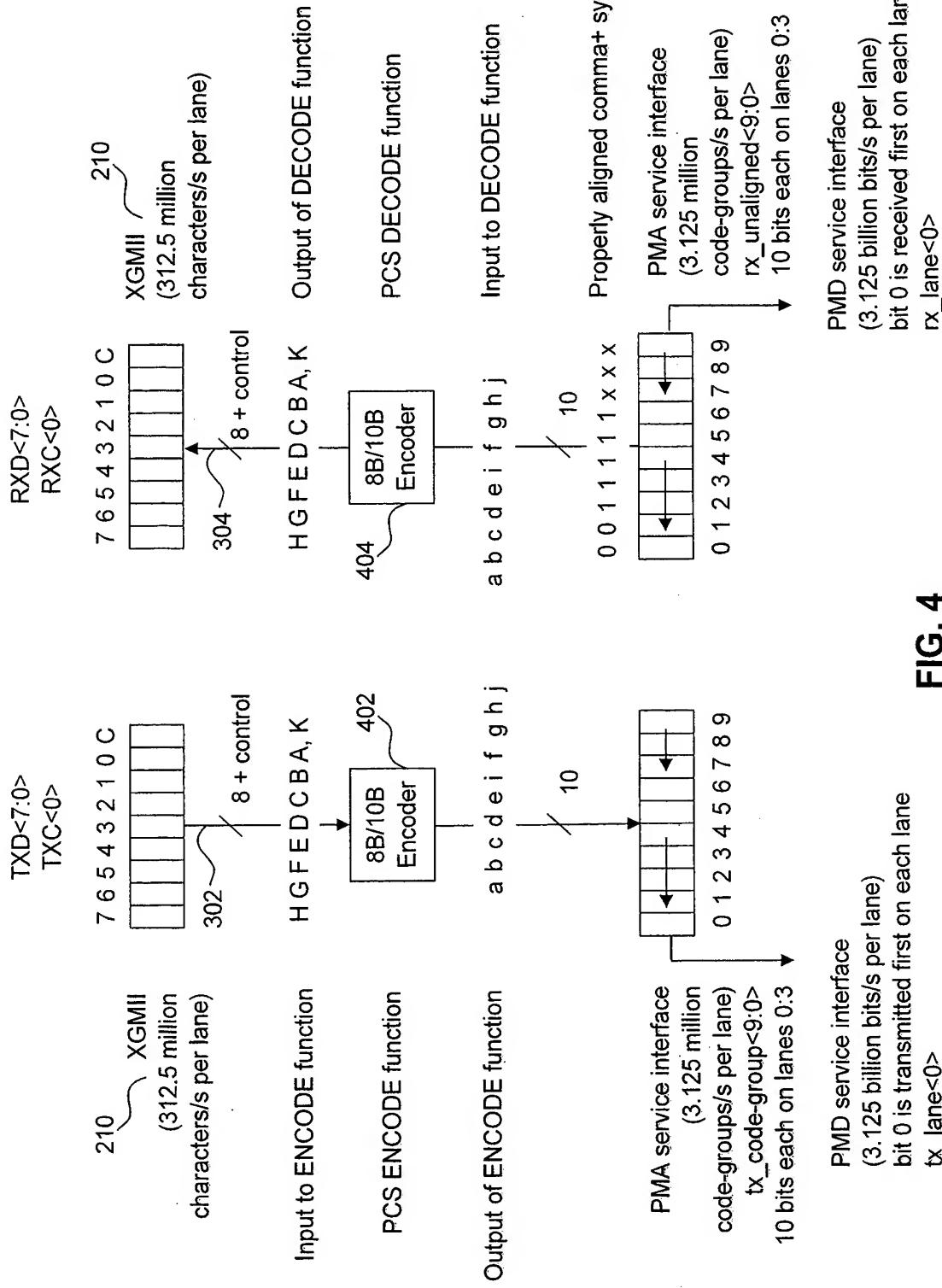


FIG. 3

FIG. 3

400

Lane 0 only shown



**FIG. 4**

XGMII TXC	XGMII TXD	PCS code-group	Description
0	00 through FF	Dxx.y	Normal data transmission
1	07	K28.0 or K28.3 or K28.5	Idle in
1	07	K28.5	Idle in   T
1	9C	K28.4	Sequence
1	FB	K27.7	Start
1	FD	K29.7	Terminate
1	FE	K30.7	Error
1	Other value in Table 36-2	See Table 36-2	Reserved XGMII character
1	Any other value	K30.7	Invalid XGMII character

NOTE—Values in TXD column are in hexadecimal.

Table 36-2—Valid special code-groups

Code Group Name	Octet Value	Octet Bits HGF EDCBA	Current RD -	Current RD +	Notes
			abcdei fghj	abcdei fghj	
K28.0	1C	000 11100	001111 0100	110000 1011	1
K28.1	3C	001 11100	001111 1001	110000 0110	1,2
K28.2	5C	010 11100	001111 0101	110000 1010	1
K28.3	7C	011 11100	001111 0011	110000 1100	1
K28.4	9C	100 11100	001111 0010	110000 1101	1
K28.5	BC	101 11100	001111 1010	110000 0101	2
K28.6	DC	110 11100	001111 0110	110000 1001	1
K28.7	FC	111 11100	001111 1000	110000 0111	1,2
K23.7	F7	111 10111	111010 1000	000101 0111	
K27.7	FB	111 11011	110110 1000	001001 0111	
K29.7	FD	111 11111	101110 1000	010001 0111	
K30.7	FE	111 11110	011110 1000	100001 0111	

NOTE 1 — Reserved.

NOTE 2 — Contains a comma.

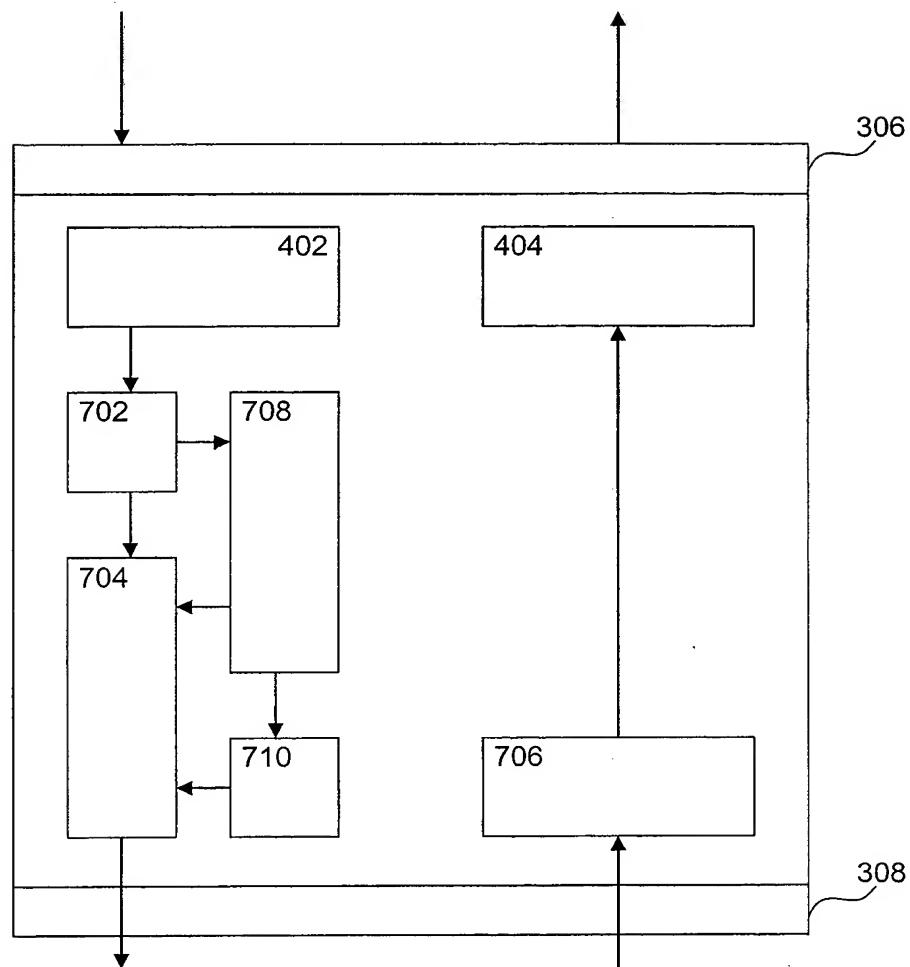
FIG. 5

Code	Ordered_Set	Number of code-groups	Encoding
	<b>Idle</b>		Substitute for XGMII Idle
K	Sync column	4	/K28.5/K28.5/K28.5/K28.5/
R	Skip column	4	/K28.0/K28.0/K28.0/K28.0/
A	Align column	4	/K28.3/K28.3/K28.3/K28.3/
<b>Encapsulation</b>			
S	Start column	4	/K27.7/Dx.y/Dx.y/Dx.y/ <sup>a</sup>
T	Terminate column	4	Terminate code-group in any lane
T <sub>0</sub>	Terminate in Lane 0	4	/K29.7/K28.5/K28.5/K28.5/
T <sub>1</sub>	Terminate in Lane 1	4	/Dx.y/K29.7/K28.5/K28.5/ <sup>a</sup>
T <sub>2</sub>	Terminate in Lane 2	4	/Dx.y/Dx.y/K29.7/K28.5/ <sup>a</sup>
T <sub>3</sub>	Terminate in Lane 3	4	/Dx.y/Dx.y/Dx.y/K29.7/ <sup>a</sup>
<b>Control</b>			
/E/	Error code-group	1	/K30.7/
<b>Link Status</b>			
Q	Sequence ordered_set	4	/K28.4/Dx.y/Dx.y/Dx.y/ <sup>a</sup>
LF	Local Fault signal	4	/K28.4/D0.0/D0.0/D1.0/
RF	Remote Fault signal	4	/K28.4/ D0.0/D0.0/D2.0/
Qrvd	Reserved	4	LF   and   RF
<b>Reserved</b>			
Fsig	Signal ordered_set	4	/K28.2/Dx.y/Dx.y/Dx.y/ <sup>a,b</sup>

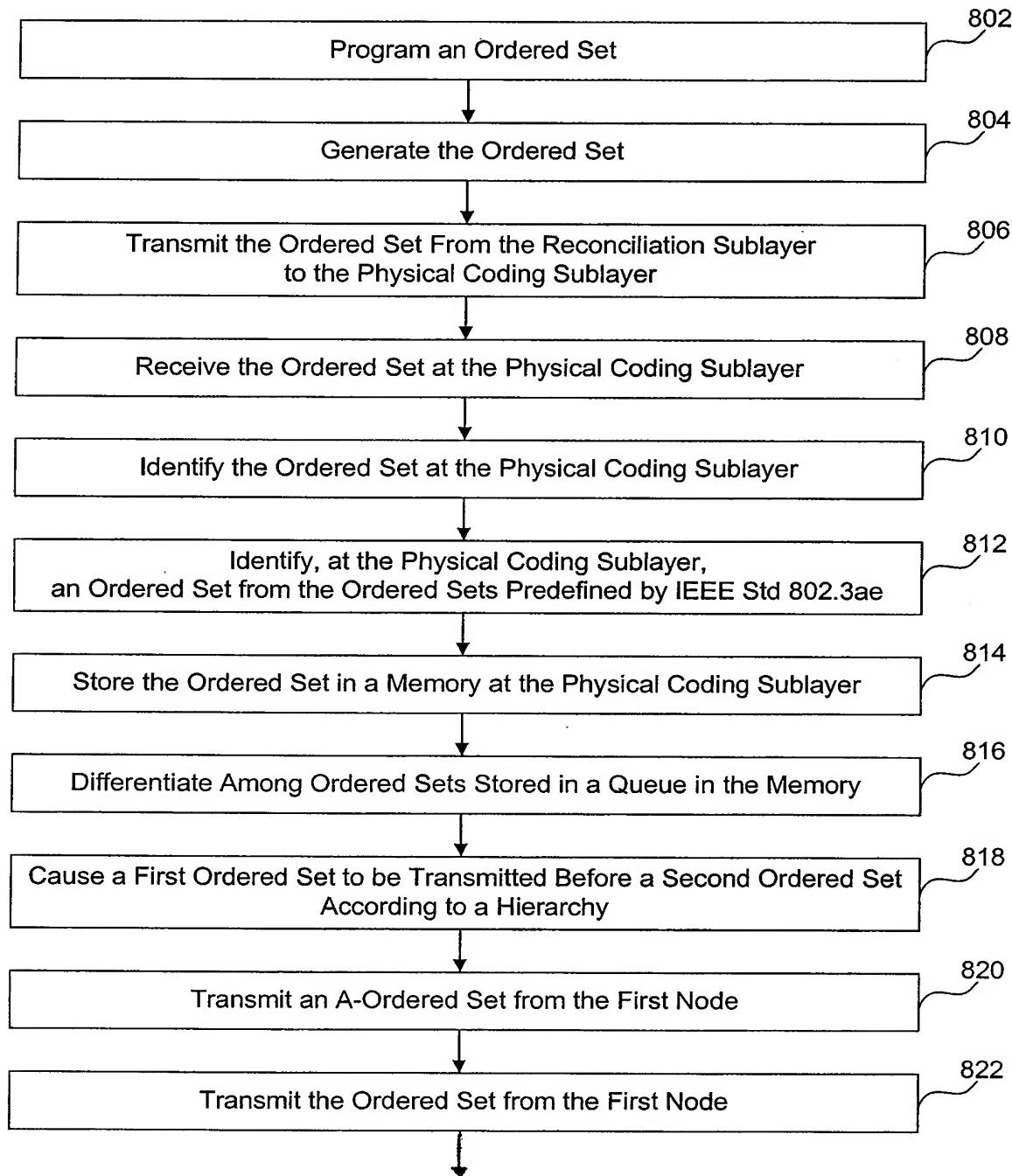
<sup>a</sup>/Dx.y/ indicates any data code-group.

<sup>b</sup>/Reserved for INCITS T11.

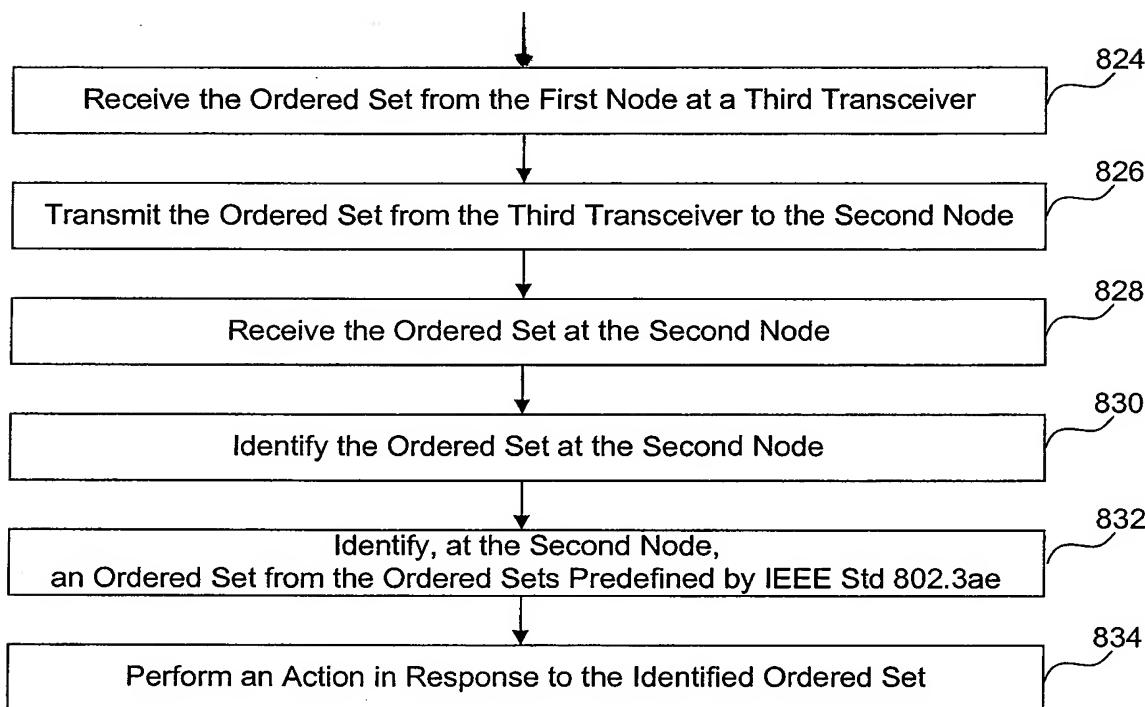
**FIG. 6**



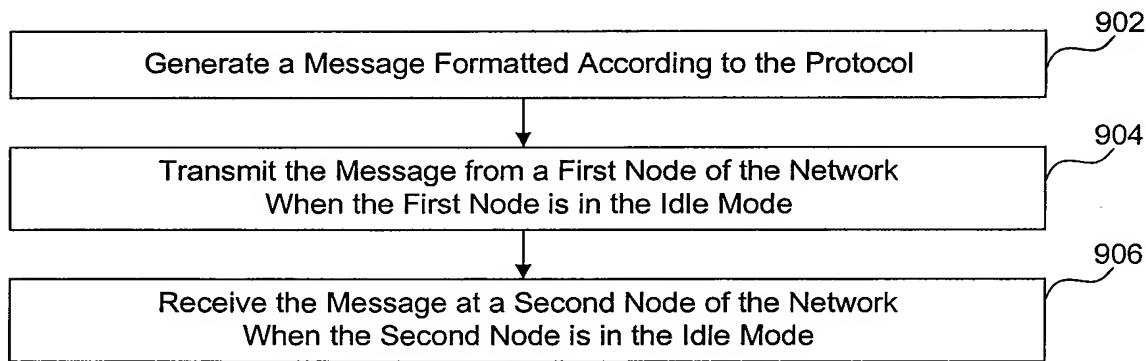
**FIG. 7**



**FIG. 8A**



**FIG. 8B**



**FIG. 9**